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[Report No. 117–270]

To promote United States values and fulfill agency missions through the use of innovative applied artificial intelligence technologies, and for other purposes.

IN THE SENATE OF THE UNITED STATES

APRIL 22, 2021

Mr. PETERS (for himself and Mr. PORTMAN) introduced the following bill; which was read twice and referred to the Committee on Homeland Security and Governmental Affairs

DECEMBER 19, 2022

Reported by Mr. PETERS, with an amendment

[Strike out all after the enacting clause and insert the part printed in italic]

A BILL

To promote United States values and fulfill agency missions through the use of innovative applied artificial intelligence technologies, and for other purposes.

1 *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Advancing American
3 AI Act”.

4 **SEC. 2. PURPOSE.**

5 The purposes of this bill are to—

6 (1) promote adoption of modernized business
7 practices and advanced technologies across the Fed-
8 eral Government that align with the values of the
9 United States, including the protection of privacy,
10 civil rights, and civil liberties;

11 (2) encourage agency artificial intelligence-re-
12 lated programs and initiatives that enhance the com-
13 petitiveness of the United States and foster an ap-
14 proach to artificial intelligence that builds on the
15 strengths of the United States in innovation and
16 entrepreneurialism;

17 (3) enhance Government venues to translate re-
18 search advances into artificial intelligence applica-
19 tions to modernize systems and assist agency leaders
20 in fulfilling their missions;

21 (4) test applied artificial intelligence to drive
22 agency productivity efficiencies in predictive supply
23 chain and logistics; and

24 (5) test applied artificial intelligence to accel-
25 erate investment return for agencies, such as for

1 portfolio management, workforce development and
2 upskilling, and for other purposes.

3 **SEC. 3. DEFINITIONS.**

4 In this Act:

5 (1) AGENCY.—The term “agency” has the
6 meaning given the term in section 3502 of title 44,
7 United States Code.

8 (2) APPROPRIATE CONGRESSIONAL COMMIT-
9 TEES.—The term “appropriate congressional com-
10 mittees” means—

11 (A) the Committee on Homeland Security
12 and Governmental Affairs of the Senate; and
13 (B) the Committee on Oversight and Re-
14 form of the House of Representatives.

15 (3) ARTIFICIAL INTELLIGENCE.—The term “ar-
16 tificial intelligence” has the meaning given the term
17 in section 238(g) of the John S. McCain National
18 Defense Authorization Act for Fiscal Year 2019 (10
19 U.S.C. 2358 note).

20 (4) DIRECTOR.—The term “Director” means
21 the Director of the Office of Management and Budg-
22 et.

23 **SEC. 4. PRINCIPLES AND POLICIES FOR USE OF ARTIFICIAL**
24 **INTELLIGENCE IN GOVERNMENT.**

25 (a) CONTINUAL REVIEW.—

1 (1) IN GENERAL.—The Director shall—

2 (A) establish mechanisms to continually re-
3 fine the guidance issued to the head of each
4 agency under section 104(a) of the AI in Gov-
5 ernment Act of 2020 (title I of division U of
6 Public Law 116–260) as best practices evolve;
7 and

8 (B) not later than 180 days after the date
9 of enactment of this Act and every year there-
10 after, brief the appropriate congressional com-
11 mittees on the mechanisms established under
12 subparagraph (A).

13 (2) CONSIDERATIONS.—In developing updates
14 to the guidance described in paragraph (1)(A), the
15 Director shall consider the input of—

16 (A) the Privacy and Civil Liberties Over-
17 sight Board;

18 (B) other governmental and nongovern-
19 mental privacy, civil rights, and civil liberties
20 experts; and

21 (C) and any other individual or entity the
22 Director determines to be appropriate.

23 (3) AMENDMENT TO AI IN GOVERNMENT ACT
24 OF 2020.—Section 104(d) of the AI in Government

1 Act of 2020 (title I of division U of Public Law
2 116–260) is amended to read as follows:

3 “(d) UPDATES.—The Director shall—

4 “(1) continually issue updates to the memo-
5 randum required under subsection (a); and

6 “(2) in any event, issue updates to the memo-
7 randum required under subsection (a)—

8 “(A) not later than 2 years after the date
9 on which the Director issues the memorandum;
10 and

11 “(B) not less frequently than annually
12 thereafter for 10 years.”.

13 (b) LEGAL AND APPROVAL PROCESSES FOR PRO-
14 CUREMENT AND USE OF AI-ENABLED SYSTEMS.—Not
15 later than 180 days after the date of enactment of this
16 Act—

17 (1) the Secretary of Homeland Security, with
18 the participation of the Chief Privacy Officer and
19 the Officer for Civil Rights and Civil Liberties of the
20 Department of Homeland Security, shall revise the
21 legal and approval processes for the procurement
22 and use of artificial intelligence-enabled systems, in-
23 cluding associated data of machine learning systems,
24 to ensure that full consideration is given to the pri-

1 vacy, civil rights, and civil liberties impacts of artifi-
2 cial intelligence-enabled systems; and

3 (2) the Chief Privacy Officer and the Officer
4 for Civil Rights and Civil Liberties of the Depart-
5 ment of Homeland Security shall report to Congress
6 on any additional staffing or funding resources that
7 may be required to carry out the requirements of
8 this subsection.

9 (e) INSPECTOR GENERAL.—Not later than 180 days
10 after the date of enactment of this Act, the Inspector Gen-
11 eral of the Department of Homeland Security shall iden-
12 tify any training needed to enable employees of the Office
13 of the Inspector General to continually advance their un-
14 derstanding of—

15 (1) rapidly evolving artificial intelligence tech-
16 nologies;

17 (2) best practices for governance, oversight, and
18 audits of the use of those technologies; and

19 (3) how the Office of the Inspector General is
20 using artificial intelligence to enhance audit and in-
21 vestigative capabilities, including actions to—

22 (A) ensure the integrity of audit and inves-
23 tigative results; and

24 (B) guard against bias in the selection and
25 conduct of audits and investigations.

1 (d) ARTIFICIAL INTELLIGENCE HYGIENE AND PRO-
2 TECTION OF PRIVACY AND GOVERNMENT INFORMA-
3 TION.—

4 (1) ESTABLISHMENT.—Not later than 1 year
5 after the date of enactment of this Act, the Administrator
6 of the Office of Federal Procurement Policy
7 and the Chief Acquisition Officers Council (in this
8 subsection referred to as the “Council”) or working
9 group thereof shall develop a process to—

10 (A) ensure that contracts involving artifi-
11 cial intelligence—

12 (i) align with the guidance issued to
13 the head of each agency under section
14 104(a) of the AI in Government Act of
15 2020 (title I of division U of Public Law
16 116–260);

17 (ii) address protection of privacy; and
18 (iii) the ownership and security of
19 data and other information obtained, pro-
20 cessed, stored, transmitted, or otherwise
21 handled by a contractor or subcontractor;
22 and

23 (B) address any other issue or concern de-
24 termined to be relevant by the Administrator of
25 the Office of Federal Procurement Policy and

1 the Council to ensure appropriate use and pro-
2 tection of privacy and Government data and
3 other information.

4 (2) **REVIEW.**—Not later than 2 years after the
5 date of enactment of this Act and every 2 years
6 thereafter, the Council shall update the process de-
7 veloped under paragraph (1).

8 (3) **BRIEFING.**—The Council shall brief the ap-
9 propriate congressional committees—

10 (A) not later than 90 days after the date
11 of enactment of this Act and thereafter on a
12 quarterly basis until the Council first imple-
13 ments the process developed under paragraph
14 (1); and

15 (B) annually thereafter on the implementa-
16 tion of the process developed under paragraph
17 (1).

18 (4) **SUNSET.**—This subsection shall cease to be
19 effective on the date that is 10 years after the date
20 of enactment of this Act.

21 **SEC. 5. AGENCY INVENTORY AND ARTIFICIAL INTEL-**
22 **LIGENCE USE CASES.**

23 (a) **IN GENERAL.**—Not later than 180 days after the
24 date of enactment of this Act, the Director, in consultation
25 with the Federal Chief Information Officer and the Chief

1 Information Officers Council, shall issue a memorandum
2 to the head of each agency that shall articulate the method
3 by which the agency shall make public information about
4 the use of artificial intelligence by the agency, including
5 the publication criteria, publication format, and method
6 of publication.

7 (b) INVENTORY.—Not later than 1 year after the
8 date of enactment of this Act, and annually thereafter for
9 a period of 10 years, the head of each agency shall—

10 (1) prepare an inventory of the artificial intel-
11 ligence use cases of the agency, including current
12 and planned uses, consistent with the memorandum
13 issued under subsection (a);

14 (2) identify, review, and assess existing artifi-
15 cial intelligence deployed and operating in support of
16 agency missions for any inconsistencies with the
17 guidance issued under section 104 of the AI in Gov-
18 ernment Act of 2020 (title I of division U of Public
19 Law 116–260) and any additional guidance issued
20 by the Director;

21 (3) develop and implement plans to achieve con-
22 sistency with the guidance issued under section 104
23 of the AI in Government Act of 2020 (title I of divi-
24 sion U of Public Law 116–260) and any additional
25 guidance from the Director for each AI application

1 or to retire AI applications found to be developed or
2 used in a manner that is not consistent with guid-
3 ance issued by the Director;

4 (4) share agency inventories with other agen-
5 cies, to the extent practicable and consistent with
6 applicable law and policy, including those concerning
7 protection of privacy and of sensitive law enforce-
8 ment, national security, and other protected infor-
9 mation; and

10 (5) make agency inventories available to the
11 public, in a manner determined by the Director, and
12 to the extent practicable and in accordance with ap-
13 plicable law and policy, including those concerning
14 the protection of privacy and of sensitive law en-
15 forcement, national security, and other protected in-
16 formation.

17 (e) SHARING.—The sharing of agency inventories de-
18 scribed in subsection (b)(4) may be coordinated through
19 the Chief Information Officers Council, the Chief Data Of-
20 ficers Council, the Chief Financial Officers Council, the
21 Chief Acquisition Officers Council, or other interagency
22 bodies to improve interagency coordination and informa-
23 tion sharing for common uses.

(d) CENTRAL INVENTORY.—The Director shall designate a host entity and ensure the creation and maintenance of an online public directory in order to—

7 (2) identify common use cases across agencies.

8 SEC. 6. RAPID PILOT, DEPLOYMENT, AND SCALE OF AP-

9 PLIED ARTIFICIAL INTELLIGENCE CAPABILI-

10 TIES TO DEMONSTRATE MODERNIZATION AC-

11 TIVITIES RELATED TO USE CASES.

(a) IDENTIFICATION OF USE CASES.—Not later than 270 days after the date of enactment of this Act, the Director shall identify not fewer than 5 new use cases for the application of cross-enterprise artificial intelligence-enabled systems to support modernization initiatives across agencies, including interagency or intra-agency initiatives that require linking multiple siloed internal and external data sources.

20 (b) PILOT PROGRAM.—

(1) PURPOSES.—The purposes of the pilot program under this section are—

(A) to enable agencies to operate cross-enterprise, coordinating between existing established

lished programs and silos to improve delivery of
the agency mission; and

1 (4) USE CASE MODERNIZATION APPLICATION
2 AREAS.—Use case modernization application areas
3 described in paragraph (2) shall include not fewer
4 than 1 from each of the following categories:

5 (A) Applied artificial intelligence to drive
6 agency productivity efficiencies in predictive
7 supply chain and logistics, such as—

8 (i) predictive food demand and optimized supply;

9 (ii) predictive medical supplies and equipment demand and optimized supply;
10 or

11 (iii) predictive logistics to accelerate disaster recovery.

12 (B) Applied artificial intelligence to accelerate agency investment return and address mission-oriented challenges, such as—

13 (i) applied artificial intelligence portfolio management for agencies;

14 (ii) workforce development and upskilling;

15 (iii) redundant and laborious analyses;

16 (iv) determining compliance with Government requirements, such as with grants management; or

1 (v) outcomes measurement to measure
2 economic and social benefits.

3 (5) REQUIREMENTS.—Not later than 3 years
4 after the date of enactment of this Act, the Director,
5 in coordination with the heads of relevant agencies
6 and other officials as the Director determines to be
7 appropriate, shall establish an artificial intelligence
8 capability that—

9 (A) solves data access and usability issues
10 with automated technology and eliminate or
11 minimize the need for manual data cleansing
12 and harmonization efforts;

13 (B) continuously and automatically ingests
14 data and updates domain models in near real-
15 time to help identify new patterns and predict
16 trends to help agency personnel to make better
17 decisions and take faster actions;

18 (C) organizes data for meaningful data vis-
19 ualization and analysis so the Government has
20 predictive transparency for situational aware-
21 ness to improve use case outcomes;

22 (D) is rapidly configurable to support mul-
23 tiple applications and automatically adapts to
24 dynamic conditions and evolving use case re-
25 quirements;

1 (E) enables knowledge transfer and col-
2 laboration across agencies; and

3 (F) preserves intellectual property rights to
4 the data and output for benefit of the Federal
5 Government and agencies.

6 (6) TECHNOLOGY MODERNIZATION FUND.—

7 (A) IN GENERAL.—The activities required
8 under this section shall be an allowable use
9 under the Technology Modernization Fund es-
10 tablished under section 1078 of the National
11 Defense Authorization Act for Fiscal Year 2018
12 (40 U.S.C. 11301 note) (in this paragraph re-
13 ferred to as the “Fund”).

14 (B) PRIORITIZATION.—The Director may
15 prioritize the activities in this section for imple-
16 mentation and funding by the Fund, in which
17 case the Director is encouraged to take steps to
18 ensure that agencies are able to rapidly and ef-
19 fективly implement the pilots under this sub-
20 section, including by removing reimbursement
21 requirements for funding from the Fund.

22 (e) BRIEFING.—Not earlier than 270 days but not
23 later than 1 year after the date of enactment of this Act,
24 and annually thereafter for 3 years, the Director shall
25 brief the appropriate congressional committees on the ac-

1 tivities carried out under this section and results of those
 2 activities.

3 **SEC. 7. ENABLING ENTREPRENEURS AND VALUES.**

4 (a) INNOVATIVE COMMERCIAL ITEMS.—Section 880
 5 of the National Defense Authorization Act for Fiscal Year
 6 2017 (41 U.S.C. 3301 note) is amended—

7 (1) in subsection (e), by striking “\$10,000,000”
 8 and inserting “\$25,000,000”; and

9 (2) by amending subsection (f) to read as fol-
 10 lows:

11 (f) DEFINITIONS.—In this section—

12 (1) the term ‘commercial product’ has the
 13 meaning given the term ‘commercial item’ in section
 14 2.101 of the Federal Acquisition Regulation; and

15 (2) the term ‘innovative’ means—

16 (A) any new technology, process, or meth-
 17 od, including research and development; or

18 (B) any new application of an existing
 19 technology, process, or method.”; and

20 (3) in subsection (g), by striking “2022” and
 21 insert “2027”.

22 (b) DHS OTHER TRANSACTION AUTHORITY.—See-
 23 tion 831 of the Homeland Security Act of 2002 (6 U.S.C.
 24 391) is amended—

25 (1) in subsection (a)—

1 (A) in the matter preceding paragraph (1),
2 by striking “September 30, 2017” and inserting
3 “September 30, 2024”, and

4 (B) by amending paragraph (2) to read as
5 follows:

6 “(2) PROTOTYPE PROJECTS.—The Secretary—

7 “(A) may, under the authority of para-
8 graph (1), carry out prototype projects under
9 section 2371b of title 10, United States Code;
10 and

11 “(B) in applying the authorities of such
12 section 2371b, the Secretary shall perform the
13 functions of the Secretary of Defense as pre-
14 scribed in such section.”;

15 (2) in subsection (e)(1), by striking “September
16 30, 2017” and inserting “September 30, 2024”, and

17 (3) in subsection (d), by striking “section
18 845(e)” and all that follows and inserting “section
19 2371b(e) of title 10, United States Code.”.

20 **SEC. 8. AUTHORIZATION OF APPROPRIATIONS.**

21 There is authorized to be appropriated such sums as
22 the necessary to carry out the requirements of this Act
23 and the amendments made by this Act.

1 **SECTION 1. SHORT TITLE.**

2 *This Act may be cited as the “Advancing American
3 AI Act”.*

4 **SEC. 2. PURPOSE.**

5 *The purposes of this Act are to—*

6 (1) *encourage agency artificial intelligence-re-*
7 *lated programs and initiatives that enhance the com-*
8 *petitiveness of the United States and foster an ap-*
9 *proach to artificial intelligence that builds on the*
10 *strengths of the United States in innovation and*
11 *entrepreneurialism;*

12 (2) *enhance the ability of the Federal Govern-*
13 *ment to translate research advances into artificial in-*
14 *telligence applications to modernize systems and as-*
15 *sist agency leaders in fulfilling their missions;*

16 (3) *promote adoption of modernized business*
17 *practices and advanced technologies across the Fed-*
18 *eral Government that align with the values of the*
19 *United States, including the protection of privacy,*
20 *civil rights, and civil liberties; and*

21 (4) *test and harness applied artificial intel-*
22 *ligence to enhance mission effectiveness and business*
23 *practice efficiency.*

24 **SEC. 3. DEFINITIONS.**

25 *In this Act:*

1 (1) *AGENCY.*—The term “agency” has the mean-
2 ing given the term in section 3502 of title 44, United
3 States Code.

4 (2) *APPROPRIATE CONGRESSIONAL COMMIT-
5 TEES.*—The term “appropriate congressional commit-
6 tees” means—

7 (A) the Committee on Homeland Security
8 and Governmental Affairs of the Senate; and
9 (B) the Committee on Oversight and Reform
10 of the House of Representatives.

11 (3) *ARTIFICIAL INTELLIGENCE.*—The term “arti-
12 ficial intelligence” has the meaning given the term in
13 section 238(g) of the John S. McCain National De-
14 fense Authorization Act for Fiscal Year 2019 (10
15 U.S.C. 2358 note).

16 (4) *ARTIFICIAL INTELLIGENCE SYSTEM.*—The
17 term “artificial intelligence system”—

18 (A) means any data system, software, ap-
19 plication, tool, or utility that operates in whole
20 or in part using dynamic or static machine
21 learning algorithms or other forms of artificial
22 intelligence, whether—

23 (i) the data system, software, applica-
24 tion, tool, or utility is established primarily
25 for the purpose of researching, developing,

1 *or implementing artificial intelligence tech-*
2 *nology; or*

3 *(ii) artificial intelligence capability is*
4 *integrated into another system or agency*
5 *business process, operational activity, or*
6 *technology system; and*

7 *(B) does not include any common commer-*
8 *cial product within which artificial intelligence*
9 *is embedded, such as a word processor or map*
10 *navigation system.*

11 (5) *DEPARTMENT.—The term “Department”*
12 *means the Department of Homeland Security.*

13 (6) *DIRECTOR.—The term “Director” means the*
14 *Director of the Office of Management and Budget.*

15 **SEC. 4. PRINCIPLES AND POLICIES FOR USE OF ARTIFICIAL**
16 **INTELLIGENCE IN GOVERNMENT.**

17 (a) *GUIDANCE.—The Director shall, when developing*
18 *the guidance required under section 104(a) of the AI in*
19 *Government Act of 2020 (title I of division U of Public Law*
20 *116–260), consider—*

21 (1) *the considerations and recommended prac-*
22 *tices identified by the National Security Commission*
23 *on Artificial Intelligence in the report entitled “Key*
24 *Considerations for the Responsible Development and*
25 *Fielding of AI”, as updated in April 2021;*

1 (2) the principles articulated in Executive Order
2 13960 (85 Fed. Reg. 78939; relating to promoting the
3 use of trustworthy artificial intelligence in Govern-
4 ment); and
5 (3) the input of—
6 (A) the Privacy and Civil Liberties Over-
7 sight Board;
8 (B) relevant interagency councils, such as
9 the Federal Privacy Council, the Chief Informa-
10 tion Officers Council, and the Chief Data Offi-
11 cers Council;
12 (C) other governmental and nongovern-
13 mental privacy, civil rights, and civil liberties
14 experts; and
15 (D) any other individual or entity the Di-
16 rector determines to be appropriate.

17 (b) *DEPARTMENT POLICIES AND PROCESSES FOR PRO-*
18 *CUREMENT AND USE OF ARTIFICIAL INTELLIGENCE-EN-*
19 *ABLED SYSTEMS.*—Not later than 180 days after the date
20 of enactment of this Act—

21 (1) the Secretary of Homeland Security, with the
22 participation of the Chief Procurement Officer, the
23 Chief Information Officer, the Chief Privacy Officer,
24 and the Officer for Civil Rights and Civil Liberties
25 of the Department and any other person determined

1 *to be relevant by the Secretary of Homeland Security,*
2 *shall issue policies and procedures for the Department*
3 *related to—*

4 *(A) the acquisition and use of artificial in-*
5 *telligence; and*

6 *(B) considerations for the risks and impacts*
7 *related to artificial intelligence-enabled systems,*
8 *including associated data of machine learning*
9 *systems, to ensure that full consideration is given*
10 *to—*

11 *(i) the privacy, civil rights, and civil*
12 *liberties impacts of artificial intelligence-en-*
13 *abled systems; and*

14 *(ii) security against misuse, degrada-*
15 *tion, or rendering inoperable of artificial in-*
16 *telligence-enabled systems; and*

17 *(2) the Chief Privacy Officer and the Officer for*
18 *Civil Rights and Civil Liberties of the Department*
19 *shall report to Congress on any additional staffing or*
20 *funding resources that may be required to carry out*
21 *the requirements of this subsection.*

22 *(c) INSPECTOR GENERAL.—Not later than 180 days*
23 *after the date of enactment of this Act, the Inspector General*
24 *of the Department shall identify any training and invest-*
25 *ments needed to enable employees of the Office of the Inspec-*

1 or General to continually advance their understanding

2 of—

3 (1) artificial intelligence systems;

4 (2) best practices for governance, oversight, and

5 audits of the use of artificial intelligence systems; and

6 (3) how the Office of the Inspector General is

7 using artificial intelligence to enhance audit and in-

8 vestigative capabilities, including actions to—

9 (A) ensure the integrity of audit and inves-

10 tigative results; and

11 (B) guard against bias in the selection and

12 conduct of audits and investigations.

13 (d) ARTIFICIAL INTELLIGENCE HYGIENE AND PROTEC-

14 TION OF GOVERNMENT INFORMATION, PRIVACY, CIVIL

15 RIGHTS, AND CIVIL LIBERTIES.—

16 (1) ESTABLISHMENT.—Not later than 1 year

17 after the date of enactment of this Act, the Director,

18 in consultation with a working group consisting of

19 members selected by the Director from appropriate

20 interagency councils, shall develop an initial means

21 by which to—

22 (A) ensure that contracts for the acquisition

23 of an artificial intelligence system or service—

24 (i) align with the guidance issued to

25 the head of each agency under section

1 *104(a) of the AI in Government Act of 2020*
2 *(title I of division U of Public Law 116–*
3 *260);*

4 *(ii) address protection of privacy, civil*
5 *rights, and civil liberties;*

6 *(iii) address the ownership and secu-*
7 *rity of data and other information created,*
8 *used, processed, stored, maintained, dissemi-*
9 *nated, disclosed, or disposed of by a con-*
10 *tractor or subcontractor on behalf of the*
11 *Federal Government; and*

12 *(iv) include considerations for securing*
13 *the training data, algorithms, and other*
14 *components of any artificial intelligence*
15 *system against misuse, unauthorized alter-*
16 *ation, degradation, or rendering inoperable;*
17 *and*

18 *(B) address any other issue or concern de-*
19 *termined to be relevant by the Director to ensure*
20 *appropriate use and protection of privacy and*
21 *Government data and other information.*

22 *(2) CONSULTATION.—In developing the consider-*
23 *ations under paragraph (1)(A)(iv), the Director shall*
24 *consult with the Secretary of Homeland Security, the*

1 *Director of the National Institute of Standards and*
2 *Technology, and the Director of National Intelligence.*

3 (3) *REVIEW.—The Director—*

4 (A) *should continuously update the means*
5 *developed under paragraph (1); and*

6 (B) *not later than 2 years after the date of*
7 *enactment of this Act and not less frequently*
8 *than every 2 years thereafter, shall update the*
9 *means developed under paragraph (1).*

10 (4) *BRIEFING.—The Director shall brief the ap-*
11 *propriate congressional committees—*

12 (A) *not later than 90 days after the date of*
13 *enactment of this Act and thereafter on a quar-*
14 *terly basis until the Director first implements*
15 *the means developed under paragraph (1); and*

16 (B) *annually thereafter on the implemen-*
17 *tation of this subsection.*

18 (5) *SUNSET.—This subsection shall cease to be*
19 *effective on the date that is 5 years after the date of*
20 *enactment of this Act.*

21 **SEC. 5. AGENCY INVENTORIES AND ARTIFICIAL INTEL-**
22 **LIGENCE USE CASES.**

23 (a) *INVENTORY.—Not later than 60 days after the date*
24 *of enactment of this Act, and continuously thereafter for*
25 *a period of 5 years, the Director, in consultation with the*

1 *Chief Information Officers Council, the Chief Data Officers*
2 *Council, and other interagency bodies as determined to be*
3 *appropriate by the Director, shall require the head of each*
4 *agency to—*

5 *(1) prepare and maintain an inventory of the*
6 *artificial intelligence use cases of the agency, includ-*
7 *ing current and planned uses;*

8 *(2) share agency inventories with other agencies,*
9 *to the extent practicable and consistent with applica-*
10 *ble law and policy, including those concerning protec-*
11 *tion of privacy and of sensitive law enforcement, na-*
12 *tional security, and other protected information; and*

13 *(3) make agency inventories available to the pub-*
14 *lic, in a manner determined by the Director, and to*
15 *the extent practicable and in accordance with appli-*
16 *cable law and policy, including those concerning the*
17 *protection of privacy and of sensitive law enforce-*
18 *ment, national security, and other protected informa-*
19 *tion.*

20 *(b) CENTRAL INVENTORY.—The Director is encouraged*
21 *to designate a host entity and ensure the creation and*
22 *maintenance of an online public directory to—*

23 *(1) make agency artificial intelligence use case*
24 *information available to the public and those wishing*
25 *to do business with the Federal Government; and*

1 (2) identify common use cases across agencies.

2 (c) *SHARING.—The sharing of agency inventories de-*

3 *scribed in subsection (a)(2) may be coordinated through the*

4 *Chief Information Officers Council, the Chief Data Officers*

5 *Council, the Chief Financial Officers Council, the Chief Ac-*

6 *quisition Officers Council, or other interagency bodies to*

7 *improve interagency coordination and information sharing*

8 *for common use cases.*

9 **SEC. 6. RAPID PILOT, DEPLOYMENT AND SCALE OF AP-**

10 **PLIED ARTIFICIAL INTELLIGENCE CAPABILI-**

11 **TIES TO DEMONSTRATE MODERNIZATION AC-**

12 **TIVITIES RELATED TO USE CASES.**

13 (a) *IDENTIFICATION OF USE CASES.—Not later than*

14 *270 days after the date of enactment of this Act, the Direc-*

15 *tor, in consultation with the Chief Information Officers*

16 *Council, the Chief Data Officers Council, and other inter-*

17 *agency bodies as determined to be appropriate by the Direc-*

18 *tor, shall identify 4 new use cases for the application of*

19 *artificial intelligence-enabled systems to support inter-*

20 *agency or intra-agency modernization initiatives that re-*

21 *quire linking multiple siloed internal and external data*

22 *sources, consistent with applicable laws and policies, in-*

23 *cluding those relating to the protection of privacy and of*

24 *sensitive law enforcement, national security, and other pro-*

25 *tected information.*

1 (b) PILOT PROGRAM.—

2 (1) PURPOSES.—The purposes of the pilot pro-
3 gram under this subsection include—4 (A) to enable agencies to operate across or-
5 ganizational boundaries, coordinating between
6 existing established programs and silos to im-
7 prove delivery of the agency mission; and8 (B) to demonstrate the circumstances under
9 which artificial intelligence can be used to mod-
10 ernize or assist in modernizing legacy agency
11 systems.12 (2) DEPLOYMENT AND PILOT.—Not later than 1
13 year after the date of enactment of this Act, the Direc-
14 tor, in coordination with the heads of relevant agen-
15 cies and other officials as the Director determines to
16 be appropriate, shall ensure the initiation of the pi-
17 loting of the 4 new artificial intelligence use case ap-
18 plications identified under subsection (a), leveraging
19 commercially available technologies and systems to
20 demonstrate scalable artificial intelligence-enabled ca-
21 pabilities to support the use cases identified under
22 subsection (a).23 (3) RISK EVALUATION AND MITIGATION PLAN.—
24 In carrying out paragraph (2), the Director shall re-
25 quire the heads of agencies to—

1 (A) evaluate risks in utilizing artificial in-
2 tellIGENCE systems; and

3 (B) develop a risk mitigation plan to ad-
4 dress those risks, including consideration of—

5 (i) the artificial intelligence system not
6 performing as expected;

7 (ii) the lack of sufficient or quality
8 training data; and

9 (iii) the vulnerability of a utilized ar-
10 tificial intelligence system to unauthorized
11 manipulation or misuse.

12 (4) *PRIORITIZATION.*—In carrying out para-
13 graph (2), the Director shall prioritize modernization
14 projects that—

15 (A) would benefit from commercially avail-
16 able privacy-preserving techniques, such as use of
17 differential privacy, federated learning, and se-
18 cure multiparty computing; and

19 (B) otherwise take into account consider-
20 ations of civil rights and civil liberties.

21 (5) *USE CASE MODERNIZATION APPLICATION*
22 *AREAS.*—Use case modernization application areas
23 described in paragraph (2) shall include not less than
24 1 from each of the following categories:

1 (A) *Applied artificial intelligence to drive
2 agency productivity efficiencies in predictive
3 supply chain and logistics, such as—*

4 (i) *predictive food demand and optimized supply;*

5 (ii) *predictive medical supplies and equipment demand and optimized supply;*
6 or
7

8 (iii) *predictive logistics to accelerate disaster preparedness, response, and recovery.*

9 (B) *Applied artificial intelligence to accelerate agency investment return and address mission-oriented challenges, such as—*

10 (i) *applied artificial intelligence portfolio management for agencies;*

11 (ii) *workforce development and upskilling;*

12 (iii) *redundant and laborious analyses;*

13 (iv) *determining compliance with Government requirements, such as with grants management; or*

14 (v) *outcomes measurement to measure economic and social benefits.*

1 (6) *REQUIREMENTS.*—Not later than 3 years
2 after the date of enactment of this Act, the Director,
3 in coordination with the heads of relevant agencies
4 and other officials as the Director determines to be
5 appropriate, shall establish an artificial intelligence
6 capability within each of the 4 use case pilots under
7 this subsection that—

8 (A) solves data access and usability issues
9 with automated technology and eliminates or
10 minimizes the need for manual data cleansing
11 and harmonization efforts;

12 (B) continuously and automatically ingests
13 data and updates domain models in near real-
14 time to help identify new patterns and predict
15 trends, to the extent possible, to help agency per-
16 sonnel to make better decisions and take faster
17 actions;

18 (C) organizes data for meaningful data vis-
19 ualization and analysis so the Government has
20 predictive transparency for situational aware-
21 ness to improve use case outcomes;

22 (D) is rapidly configurable to support mul-
23 tiple applications and automatically adapts to
24 dynamic conditions and evolving use case re-
25 quirements, to the extent possible;

1 (E) enables knowledge transfer and collaboration across agencies; and

3 (F) preserves intellectual property rights to
4 the data and output for benefit of the Federal
5 Government and agencies.

6 (c) *BRIEFING*.—Not earlier than 270 days but not
7 later than 1 year after the date of enactment of this Act,
8 and annually thereafter for 4 years, the Director shall brief
9 the appropriate congressional committees on the activities
10 carried out under this section and results of those activities.

11 (d) *SUNSET*.—The section shall cease to be effective on
12 the date that is 5 years after the date of enactment of this
13 Act.

14 **SEC. 7. ENABLING ENTREPRENEURS AND AGENCY MIS-**
15 **SIONS.**

16 (a) *INNOVATIVE COMMERCIAL ITEMS*.—Section 880 of
17 the National Defense Authorization Act for Fiscal Year
18 2017 (41 U.S.C. 3301 note) is amended—

19 (1) in subsection (c), by striking “\$10,000,000”
20 and inserting “\$25,000,000”;

21 (2) by amending subsection (f) to read as follows:

22 “(f) *DEFINITIONS*.—In this section—

23 “(1) the term ‘commercial product’—

1 “(A) has the meaning given the term ‘com-
2 mercial item’ in section 2.101 of the Federal Ac-
3 quisition Regulation; and

4 “(B) includes a commercial product or a
5 commercial service, as defined in sections 103
6 and 103a, respectively, of title 41, United States
7 Code; and

8 “(2) the term ‘innovative’ means—

9 “(A) any new technology, process, or meth-
10 od, including research and development; or

11 “(B) any new application of an existing
12 technology, process, or method.”; and

13 (3) in subsection (g), by striking “2022” and in-
14 sert “2027”.

15 (b) *DHS OTHER TRANSACTION AUTHORITY*.—Section
16 831 of the Homeland Security Act of 2002 (6 U.S.C. 391)
17 is amended—

18 (1) in subsection (a)—

19 (A) in the matter preceding paragraph (1),
20 by striking “September 30, 2017” and inserting
21 “September 30, 2024”; and

22 (B) by amending paragraph (2) to read as
23 follows:

24 “(2) *PROTOTYPE PROJECTS*.—The Secretary—

1 “(A) may, under the authority of para-
2 graph (1), carry out prototype projects under
3 section 2371b of title 10, United States Code;
4 and

5 “(B) in applying the authorities of such sec-
6 tion 2371b, the Secretary shall perform the func-
7 tions of the Secretary of Defense as prescribed in
8 such section.”;

9 (2) in subsection (c)(1), by striking “September
10 30, 2017” and inserting “September 30, 2024”; and
11 (3) in subsection (d), by striking “section
12 845(e)” and all that follows and inserting “section
13 2371b(e) of title 10, United States Code.”.

14 (c) **COMMERCIAL OFF THE SHELF SUPPLY CHAIN**
15 *RISK MANAGEMENT TOOLS.—The General Services Admin-
16 istration is encouraged to pilot commercial off the shelf sup-
17 ply chain risk management tools to improve the ability of
18 the Federal Government to characterize, monitor, predict,
19 and respond to specific supply chain threats and
20 vulnerabilities that could inhibit future Federal acquisition
21 operations.*

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A BILL

To promote United States values and fulfill agency missions through the use of innovative applied artificial intelligence technologies, and for other purposes.

DECEMBER 19, 2022

Reported with an amendment